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MARKET CLASSES AND GRADES OF LAMBS AND SHEEP

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NEED FOR STANDARDIZATION

Standard classes and grades for sheep and lambs perform an extremely useful purpose in trading. Standards serve as a basis in determining values, in describing animals or groups of animals, in specifying uses, in facilitating sales between buyer and seller whether together or widely separated, and in reporting sales. Generally speaking, most animals of this species are slaughtered eventually, but many of those shipped to the public livestock markets, as well as those sold direct from farms and ranches, are bought by farmers and feeders for breeding purposes or for further feeding preparatory to slaughter. Without a well-defined and all-inclusive set of standards for classifying and grading sheep and lambs, trading would be seriously hampered, and fraught with misunderstandings and misconceptions on the part of the interests involved.

Evidence that standards are indispensable is supplied by trading practices handed down from the early days of the livestock industry, some of which still are in more or less general use. The basis for those early efforts was largely type of breeding and found expression in terms related to place of origin. Thus, "natives" were those from the farm-flock States, "westerns" were from

[1] Credit is hereby given to D. A. Spencer in charge of sheep, goats, and animal fiber investigations of the Bureau of Animal Industry who assisted in the experimental grading and in obtaining illustrations of both live lambs and their carcasses typical of the grades, and who gave many valuable suggestions in connection with the preparation of the grade descriptions.

the ranches of the West and Southwest, "blackfaced" referred to sheep of mutton-type breeding, while "whitefaced" referred to sheep of fine-wool-type breeding. Others were known as "Montanas', Idahos', Wyomings' ", etc. To one not familiar with the type and class of sheep produced in the various States and areas, such terms were meaningless, but to one accustomed to trading in sheep at the livestock markets, these terms or nomenclature were packed full of information.

With the increase in the number of purebred flocks, the growth of and improvement in system of transportation and communication, and changes in consumer demand, the type and character of sheep produced in many sections changed, and descriptive terms based on point of origin, which were inadequate, lost their former significance. To meet the changing conditions other descriptive terms came into local and general use, but the significance of these varied with the seasons and were subject to much misunderstanding.

These conditions were recognized years ago and in 1908 a bulletin published by the Illinois Agricultural Experiment Station outlined and described the classes and grades of sheep and lambs then used as a basis for trading at the Union Stock Yards in Chicago. That bulletin served the very useful purpose of bringing about a more uniform understanding of the meaning and limitations of the various terms relating to classes and grades of sheep then in use at that and other markets.

The schedule of market classes and grades of sheep appearing in this circular makes use of the schedule set forth in the Illinois bulletin, along with modifications to care for the refinements of present-day livestock marketing.

CLASSIFYING AND GRADING

Classifying and grading as applied to livestock constitute a process whereby animals are divided and subdivided into smaller and smaller groups, each division being based on one or more fundamental principles. As the groups decrease in size the individual units which constitute a given group show constantly increasing similarity in all essential respects.

Classifying is limited to dividing animals into the major subdivisions known as "classes, subclasses, ages, and weights." The more important classes are Ewes, Wethers, and Rams. The class is based largely on sex or sex condition. The real reason, however, lies deeper than this. The animals being male or female, castrated or uncastrated, does not concern either the butcher or consumer unless it affects the principal characteristics in some manner. The fact that a sharp discrimination is practiced indicates that there is a basic and fundamental reason for it. Such discrimination is really due to the effect sex condition has upon the shape, finish, and quality of the carcass. For example, as a ram gets older it develops a larger, more masculine head, thicker neck and shoulders. This changes the percentage yield and quality of the various cuts of the carcass to a marked degree, thus causing discrimination in the prices paid for the live animals. The ewe develops in an opposite manner, while the wether has characteristics that are less pronounced than either the ewe or ram. This is true despite the fact that a very close

relationship exists between the three grade factors and that it is impossible materially to raise or lower one without seriously affecting the other two. The importance of the ratio in which the three fundamental characteristics occur as opposed to mere sex condition, which is in reality rather a cause than an effect, is indicated by the fact that in the case of very young animals sex condition is frequently ignored as a price-determining factor.

A subclass is a subdivision of a class and consists of a group of animals which differ from animals in other similar groups in relative suitability for certain general uses. The subclasses are Slaughter, Feeder, Shearer, and Breeder. In the case of the first one (Slaughter), the chief basis of the subclass is degree of finish or fatness. The other subclasses, however, are based on suitability for special uses which involve various considerations.

Sheep are separated on the basis of age into Yearlings and Mature sheep; and lambs are separated on the same basis into Hothouse, Spring, and more mature Lambs (pl. 1). They also may, and generally are, sorted into light-, medium-, and heavy-weight groups, with more or less definite ranges for each group.

Grading constitutes the last process of sorting and results in much smaller but much more uniform groups than the classes. Grading consists in determining the degree of excellence of individual animals. A grade is a subdivision of a weight selection based on the different degrees of conformation, finish, and quality of animals. Every meat animal possesses these grade factors in some degree but such characteristics vary widely between individuals.

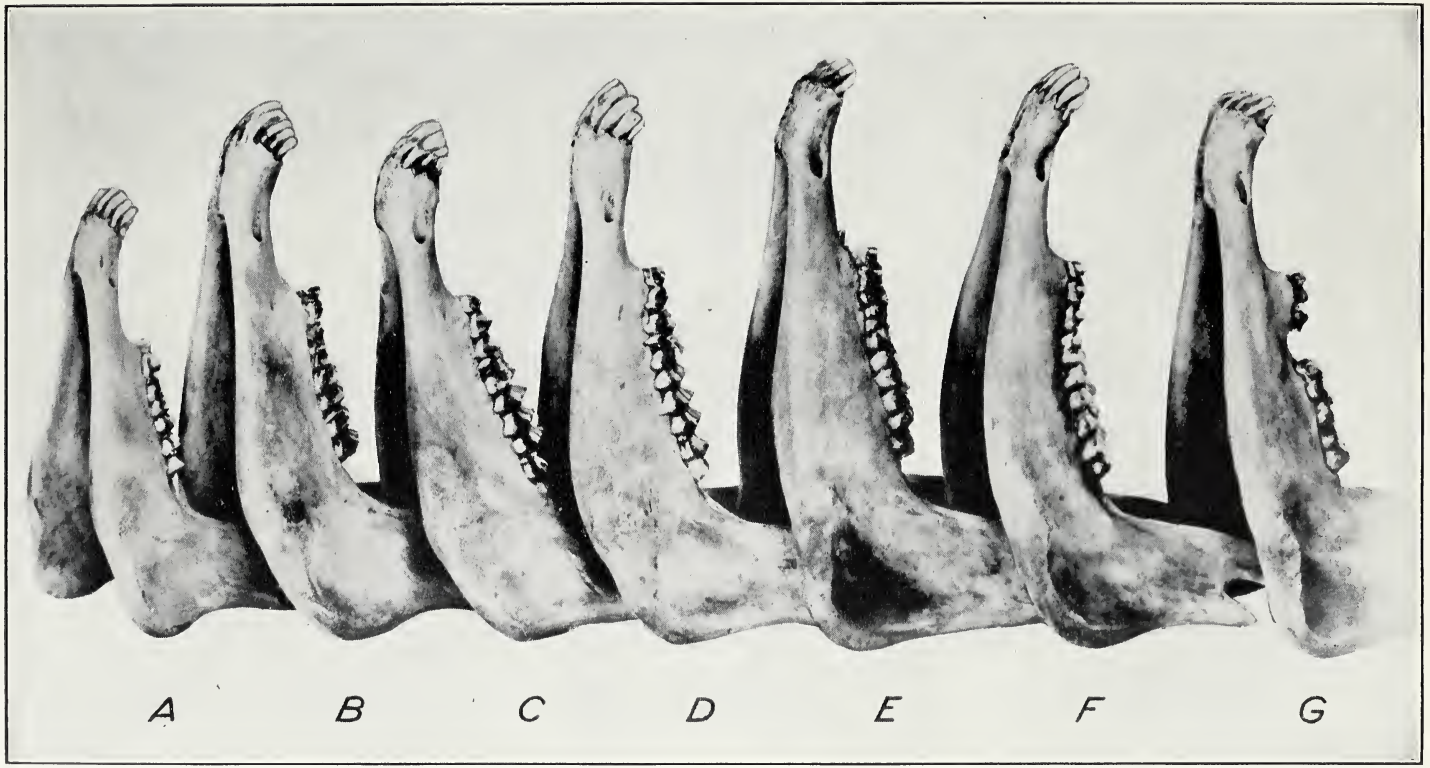
Grade is not determined by any single characteristic but is the resultant of all three. For example, an animal may possess a sufficiently high degree of conformation to grade Good but may be so lacking in finish that it cannot be graded higher than Medium.

No grade represents an exact point or definite degree. On the contrary, each grade has a certain width with upper and lower limits. This means that two animals may show some variation in the resultant combination of conformation, finish, and quality and yet be placed in the same grade. If the variations are great, however, they will fall into different grades. Although each grade has a certain width and covers a certain range of degrees, the grade of an individual animal occupies a specific point within the range.

The purpose of classifying and grading livestock commercially is to sort the animals so that the individuals making up a group will present great uniformity and correspond closely with the ideal or standard which has been established for that group. By attaining this end it is possible to more accurately determine values and report such transactions.

Sheep and lambs as well as other meat animals represent a wide range in characteristics from the most desirable to the least desirable. Some possess excellent conformation, whereas others are ill-shaped and rough; some are moderately fat, while others are very fat or very thin; some are very young and others are very old; some are heavy and others are light in weight; and finally, some possess the highest degree of quality, whereas others are extremely deficient in that respect.

A, Hothouse Lamb; *B*, Spring Lamb; *C*, Lamb.



Lower jaws of lambs and sheep showing the difference in length, width, and number of primary and permanent teeth appearing in the front part of the jaw: *A*, Lamb; *B*, Yearling; *C*, 2-year-old; *D*, 3-year-old; *E*, 4-year-old; *F* and *G*, over 4 years old.

DEFINITIONS AND DESCRIPTIONS OF MARKET GROUPS

The term "sheep" includes ovine animals of all ages. In practice, however, this species is divided on the basis of age into two groups, namely, Sheep and Lambs. Lambs include those that are approximately 1 year of age and younger, and Sheep include all those that are about 1 year of age and older.

A Ewe is a female sheep.

A Wether is a male sheep which was castrated before it had reached sufficient maturity to make reproduction possible and has developed characteristics peculiar to its class. As a rule, castration is done before the animal is 6 weeks old.

A Ram is an uncastrated male sheep.

Slaughter animals are those possessing sufficient fat or finish to meet the requirements of the consuming trade. This designation covers all animals which will produce meat that is wholesome and fit for human food. Any such animal may be slaughtered and consumed.

Feeders are animals which lack sufficient finish to produce the highest grades of meat but which show evidences, as a rule, of ability to take on additional flesh and fat economically, most of the gain resulting from additional fat or finish rather than growth.

Shearer is a subclass of Lamb denoting animals that are in full fleece and that are purchased primarily for their wool. Such lambs, as a rule, either are fat or are in higher flesh condition than most feeders and they usually have longer wool. They are taken to feed lots and shorn, then after a brief feeding period are returned to the market for resale.

Breeders are sheep or lambs sold for breeding purposes. As a rule transactions in breeding sheep (Breeders) at the public markets are confined to females of the species and ordinarily not many ewe lambs are sold for this purpose. Most of the breeding ewes sold at the markets are relatively young ewes from range bands. They possess good conformation and quality and show evidence of improved breeding.

A Lamb is a young ovine animal which has not yet acquired its first pair of permanent teeth. The age at which this occurs varies in individuals from around 10 to 15 months. As the animal approaches the Yearling stage, therefore, it is sometimes necessary to inspect the mouth to determine whether it is still a Lamb. If it has not yet acquired its first pair of permanent teeth it is considered a Lamb (pl. 2, *A*). Ewe and Wether lambs, as a rule, produce carcasses that are similar, therefore buyers do not differentiate between them. At many of the leading markets, however, Ram Lambs are discriminated against because they show the influence of sex development, especially if they are more than 4 or 5 months of age. They tend to develop thicker necks and slightly broader and heavier shoulders than do the Ewe and Wether lambs. The differences between the two in this respect, however, are seldom sufficient to justify separate grade descriptions.

Hothouse Lambs.—A Hothouse Lamb is a very young animal that has been raised, as a rule, in confined quarters and has received an abundance of its mother's milk during the short period of its

life. Both the lamb and its mother receive special care so that maximum growth and finish may be attained, since most Hothouse Lambs are marketed at 6 to 10 weeks of age. Such lambs are usually marketed during the period from Christmas to the Easter holidays through wholesale houses or direct on order at weights ranging from 30 to 60 pounds.

Spring Lambs.—Spring Lamb is generally applied to new-crop lambs that come to market in the spring of the year. It is used to distinguish them from old-crop or fed lambs that were born in the early part of the previous year. In market practice the term "spring" is dropped on the first of July and the more common term "lamb" is used. At the same time the old-crop lambs are classified as yearlings. On account of varying climatic conditions in different sections of the country, however, lambs produced in a manner similar to those called "spring lambs" previous to July 1 arrive at some markets throughout the summer and early fall.

Spring Lambs are those generally ranging from 3 to 7 months in age which have run with their dams from birth and derived a large part of their food therefrom. Since the Spring Lamb is older than a Hothouse Lamb, the wool is longer. The body is slightly deeper and wider in proportion to its length, and is less cylindrical than that of the Hothouse Lamb. The face is somewhat longer and the eyes, nostrils, mouth, and ears are relatively larger. As compared with older lambs, however, the features of the Spring Lamb are relatively small, and its wool is shorter than that of one approaching the Yearling stage. This gives it a decidedly youthful appearance. Spring Lambs weighing from 70 to 90 pounds are in most popular demand.

Lambs.—During the latter part of the summer and early fall, the lambs coming to market show less and less the effect produced from subsisting largely on milk and more and more that of having subsisted on feed other than milk. This group includes those that are older and more fully developed than Spring Lambs. They range in age from approximately 7 to 15 months, but the bulk are from 8 to 12 months old. Those that approach the Yearling stage show greater maturity in all respects than do Spring Lambs. As a rule, they are relatively wider and deeper in body and more heavily fleshed. The wool is longer and slightly darker in color owing to greater exposure to weather and dirt. The head and face are longer and show greater maturity around the mouth, eyes, and ears. Included in this group are the so-called "fed lambs" marketed during the winter and early spring.

GRADE FACTORS

The three major grade factors—conformation, finish, and quality—on which this system of grading is based, comprise most of the essential characteristics of the Sheep or Lamb and its carcass. Each of these factors exist in some degree in every animal, and the outstanding differences between animals in each grade consist chiefly in the different degrees of the three factors possssed by the individuals. Definitions and descriptions of the grade factors follow.

CONFORMATION

Conformation is build, shape, outline, or contour of the animal. It is a matter of symmetry or relative proportions among parts. The degree of conformation is determined by the proportionate relationship of width, depth, and length of the body to each other. In live animals, standards of conformation vary according to the immediate use that is to be made of such animals. Grade for grade, thicker flesh and more rounded conformation are usually demanded in slaughter animals than in those that are to be used as feeders.

FINISH

Finish is fat. It involves not only the quantity of fat that covers the body, but also its character and distribution. A thick, firm covering over the ribs, spinal column, loin, and rump is an indication of a well-finished animal. Standards for degree of finish vary with the use of the animal. In the carcass it includes the fat on the walls of the abdominal and thoracic cavities, the seams of fat between the muscles, and the intramuscular and intercellular fats.

QUALITY

Quality in an animal is that inherent property which, in combination with other characteristics such as refinement and breeding, influences its relative degree of excellence as a meat animal. The degrees of firmness and thickness of flesh over the back, ribs, and loin are also indications of the degree of quality. Refinement includes smooth, even features of the face and head; smooth shoulders and rump; fine hair on face and legs; and smooth, medium-sized knee and hock joints. Breeding refers to the indications of the degree of improved blood lines as compared with nondescript breeding.

FACTORS AFFECTING VALUE

Three factors, not in themselves grade factors, affect the market prices of Sheep and Lambs. They are weight, excessive finish, and carcass yield. These factors are discussed here not only because they usually influence price to some extent but because they are frequently, though incorrectly, referred to as grade factors. A careful study of the relationship of these factors to grade indicates that they do not have a direct bearing on grades despite their influence on prices.

WEIGHT

Weight is an important price factor in both Sheep and Lambs, but it is especially important in the case of Lambs. As a rule, heavy sheep and lambs are in less demand at the markets than animals of lighter weight.

Slaughter Lambs that weigh 70 to 90 pounds usually are preferred and they bring a higher price per pound, grade for grade, than do those weighing more than 90 pounds. This difference in price is based on demand and is largely the result of consumer preference for small or medium-sized cuts. Slaughter Ewes that weigh 90 to 120 pounds are in relatively greater demand than those

weighing over 120 pounds. Because of the rather limited demand for the heavier ewes, most of which are considered by the trade to be too fat, they usually sell at prices considerably below those of the lighter weight ewes.

EXCESSIVE FINISH

"Overfat", "wasty", and "excessive finish" are terms frequently used in the wholesale meat trade, when referring to carcasses that have a very large amount of fat in proportion to lean. This condition is more frequent with heavyweight ewes and wethers, but it sometimes occurs with lambs, especially those that have been fitted for show purposes.

CARCASS YIELD

Carcass yield, or the carcass weight in relation to live animal weight, is another element that affects the price of Slaughter Sheep and Slaughter Lambs.

Since the meat of the animal is its principal commercial product, the number of pounds of carcass the slaughterer obtains from each 100 pounds of live weight is a matter of real consequence and determines to a considerable extent the price of Slaughter Lambs. For that reason, yield often is considered by some as a grade factor. Under certain conditions yield is closely related to grade, because, as a rule, higher yields are obtained from the better grades while low yields and low grades are closely associated. Other factors affecting yield are weight of pelt and amount of fill.[2]

The weight of pelt varies greatly among animals of the same grade, depending on type of breeding, length of staple, and quantity of foreign material it contains. All of these factors influence the total weight of pelts which greatly affects the carcass yield. As a rule, weight is of much greater importance than the quantity or grade of the wool. At times when wool prices are high the price of Slaughter Lambs is influenced by both the wool and carcass yield. The pelts from the Fine-Wool-type sheep usually weigh more than those from the Mutton-type sheep because of the heavier fleece and thicker skin that is characterized by folds or wrinkles.

Carcass yield also is influenced by the fill or quantity of feed and water an animal consumes after it arrives at the market. This varies somewhat with the method of transportation, time in transit, and distance trucked or shipped to market. Lambs that have been hauled relatively short distances by truck show evidences of greater fill than those that have been shipped long distances by rail.

LAMBS

Since lambs constitute more than 90 percent of the market supply of sheep and lambs, the discussion of lambs is placed before that of sheep in this circular (pl. 3).

The following schedule shows, in a condensed form, how lambs are segregated into market groups according to classes, subclasses, ages, weights, and grades.

[2] Fill refers to the contents of the stomach and intestinal tract.

Prize-winning lambs exhibited at the International Livestock Exposition, produced at Dubois, Idaho, by the United States Department of Agriculture, fed and exhibited by Purdue University, La Fayette, Ind.

LAMB SCHEDULE

Class	Subclass (based on use)	Age designation	Weight	Grade
Ewes, wethers, rams.	Slaughter	Hothouse	60 pounds down	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain[1] or No. 4.
		Spring	90 pounds down	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
		Lambs	Lightweight, 70 pounds down.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Handyweight, 70 to 80 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Mediumweight, 80 to 90 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Heavyweight, 90 pounds up.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
	Feeder	All ages	All weights	Fancy or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Inferior or No. 5.
	Shearer	do	do	Choice or No. 1. Good or No. 2. Medium or No. 3.

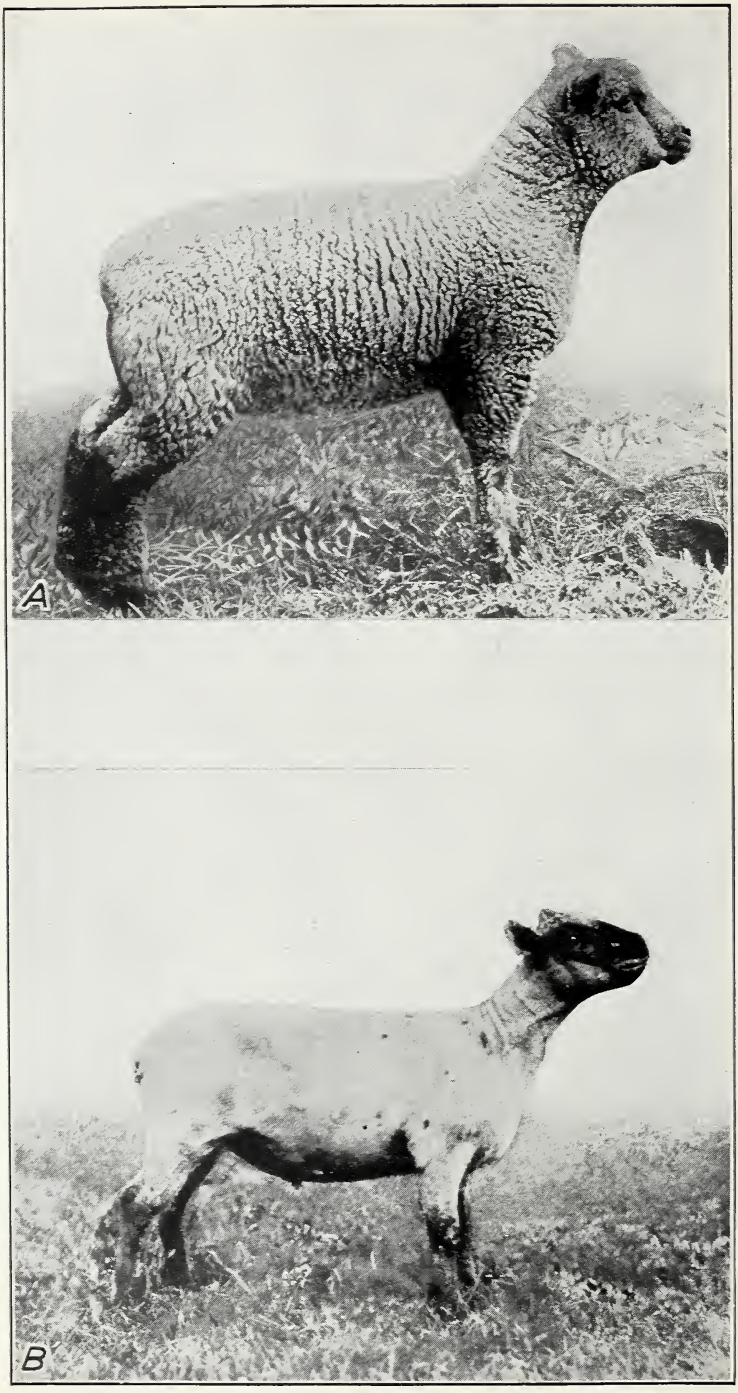
[1] Formerly designated as "Common."

GRADES OF SLAUGHTER LAMBS

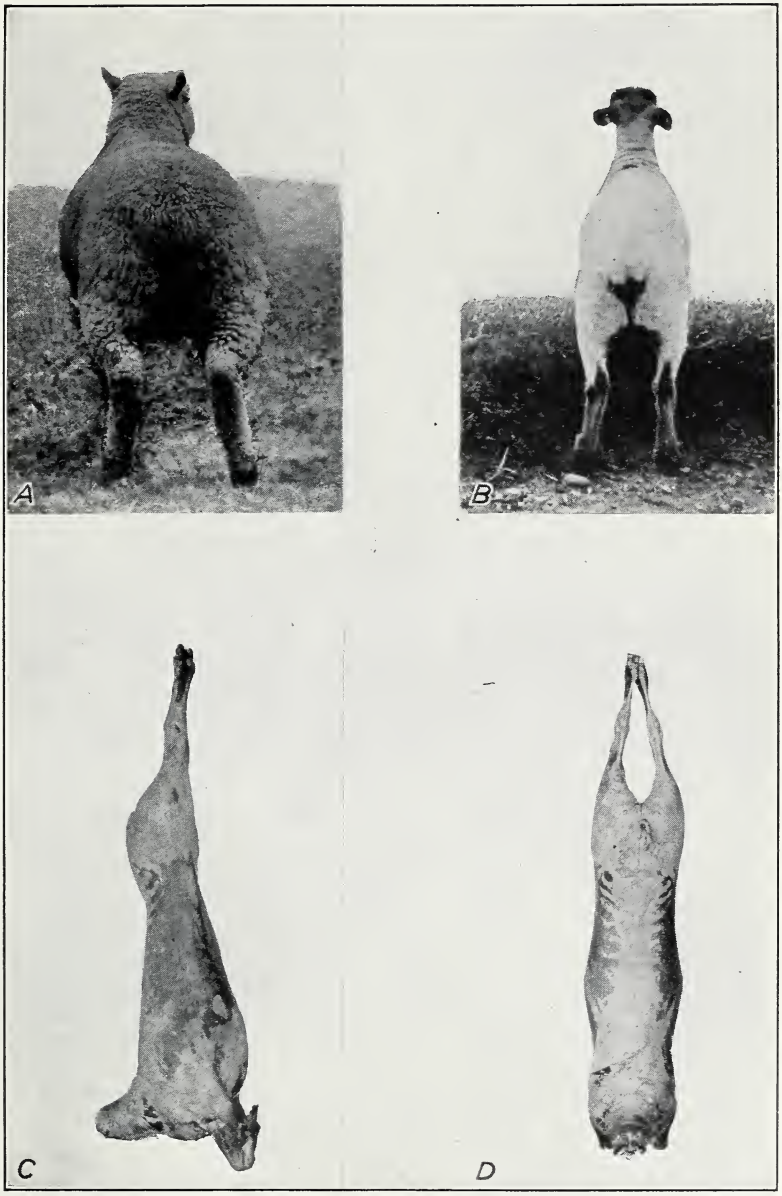
The following descriptions of grades of lambs is limited to the middle of the range or the average of the grade. Each grade, therefore, has a certain definite width above and below the point described. Experience enables one to determine the limits of each grade with a great degree of accuracy.

PRIME OR NO. A1 GRADE SLAUGHTER LAMB

A Prime or No. A1 grade Slaughter Lamb has excellent conformation, finish, and quality (pls. 4 and 5).



A, Prime grade Slaughter Lamb, unshorn; *B*, Prime grade Slaughter Lamb, shorn.



A, Prime grade Slaughter Lamb, unshorn; *B*, Prime grade Slaughter Lamb, shorn; *C*, Prime grade Lamb carcass, side view; *D*, Prime grade Lamb carcass, back view.

Conformation.—The body is very compact and symmetrical. It is very deep and wide in proportion to its length. All parts are fully developed, producing a very smooth and even body outline. The flesh over all parts of the body is very thick, giving it a very plump and well-rounded appearance. The back, loin, and rump are very wide. The leg (thigh) is very large and plump, and is very full and low in the twist. A Prime Lamb has a very uniform, straight-lined middle. The crops are very full and the shoulders are very thick, blending smoothly into the body. The neck is thick and very short.

Finish.—The fat covering is thick, but not excessive, and extends well over all parts of the body. It is very firm and smooth, and evenly distributed. The fat covering over the back, ribs, and loin almost entirely conceals the bones from the touch.

Quality.—A Prime grade Lamb has excellent quality. It is very smooth and firm in all parts of the body. It has a refined, medium-sized head, and the leg bone (cannon bone) and the shoulders are smooth and are even in width with the rest of the body. The proportion of flesh to bone is very large. Such a lamb is usually of Mutton type. The thick, evenly distributed finish over the body indicates a generous supply of fat throughout all parts of the carcass. These characteristics generally indicate a very high degree of quality in the flesh.

Choice or No. 1 Grade Slaughter Lamb

A Choice or No. 1 grade Slaughter Lamb has very good conformation, finish, and quality (pls. 6 and 7).

Conformation.—The body is compact and symmetrical. It is deep and wide in proportion to its length. The flesh over all parts is thick and evenly developed, producing a smooth rounded appearance. The back, loin, and rump are wide. The leg is large and full and is low in the twist. A Choice grade Lamb has nearly a straight-lined middle. The crops are full and the shoulders are thick. The neck is short and thick.

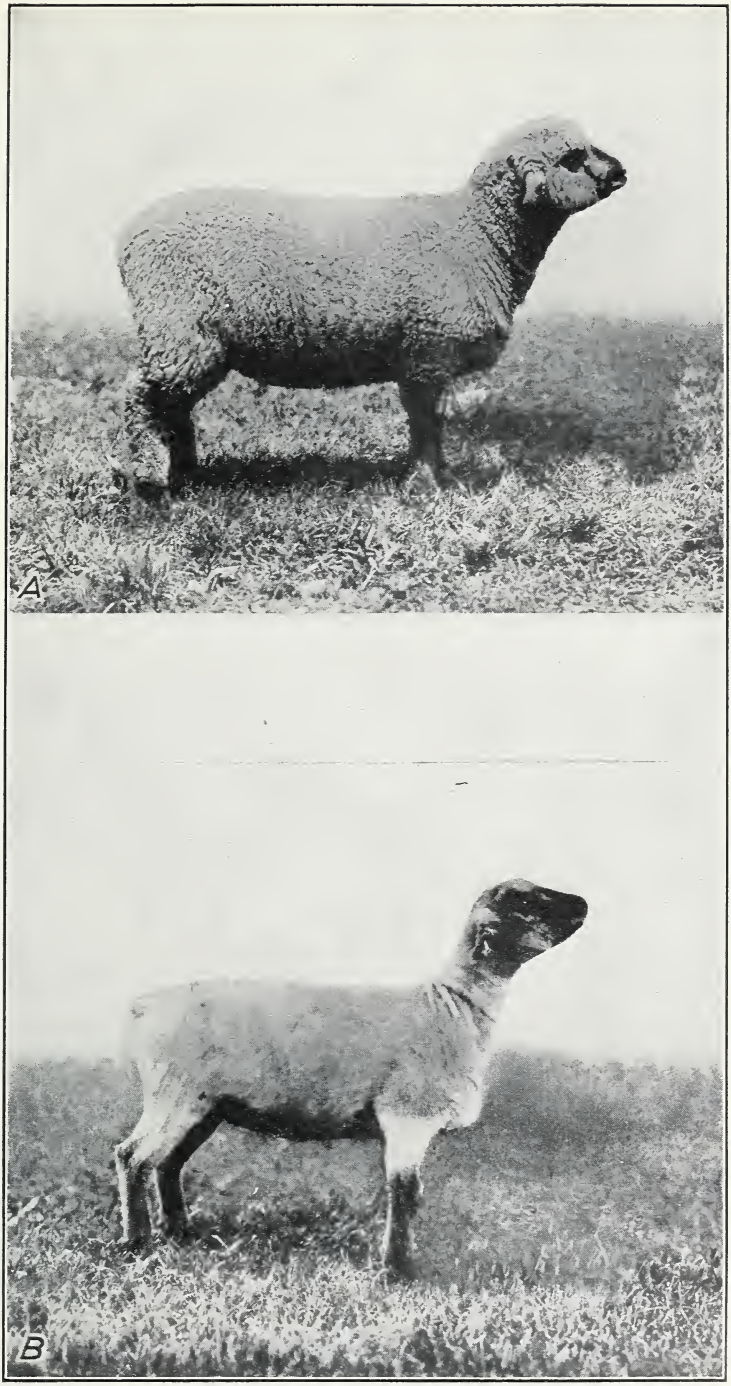
Finish.—The fat covering is moderately thick and firm, and even in distribution, and extends over nearly all parts of the body. The fat covering over the back, ribs, and loin is moderately thick.

Quality.—A Choice grade Lamb has very good quality. It is smooth and firm in all parts of the body. It has a moderately refined, medium-sized head and bone, with little or no pronounced coarseness. Its shoulders are smooth and are even in width with the rest of the body. The proportion of flesh to bone is large. Such a lamb is usually of Mutton-type or improved Fine-Wool-type breeding. The moderately thick, smooth, firm finish, evenly distributed over the body, indicates a generous supply of fat throughout all parts of the carcass. These characteristics generally indicate a high degree of quality in the flesh.

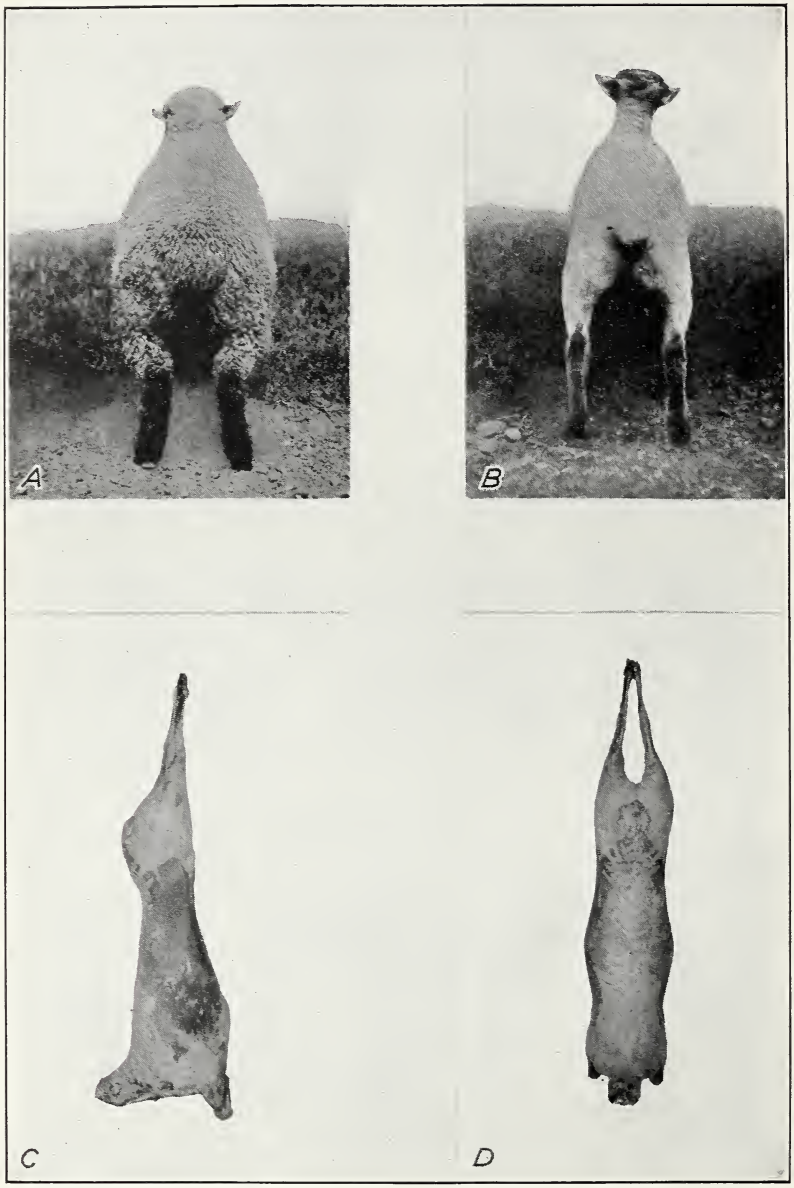
Good or No. 2 Grade Slaughter Lamb

A Good or No. 2 grade Slaughter Lamb has good conformation, finish, and quality (pls. 8 and 9).

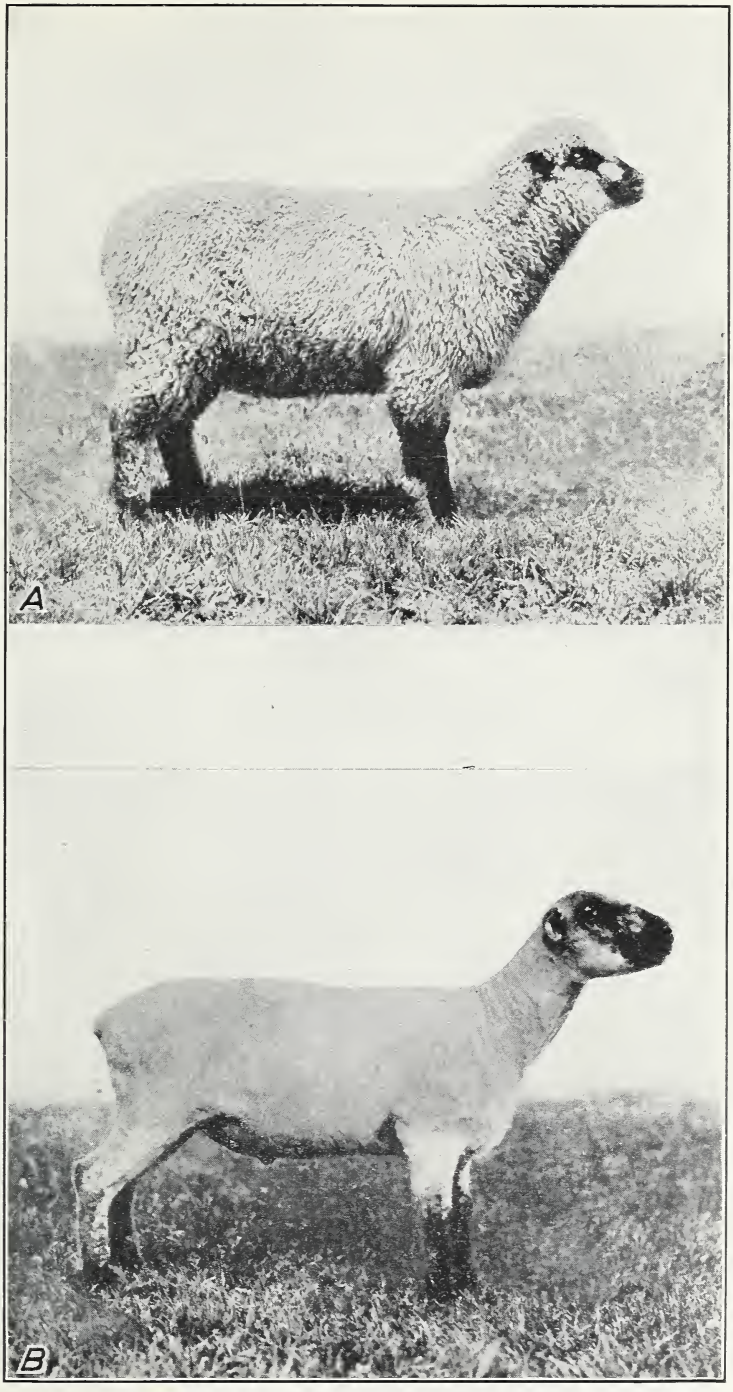
Conformation.—The body is moderately compact and symmetrical. It is moderately deep and wide in proportion to its length.



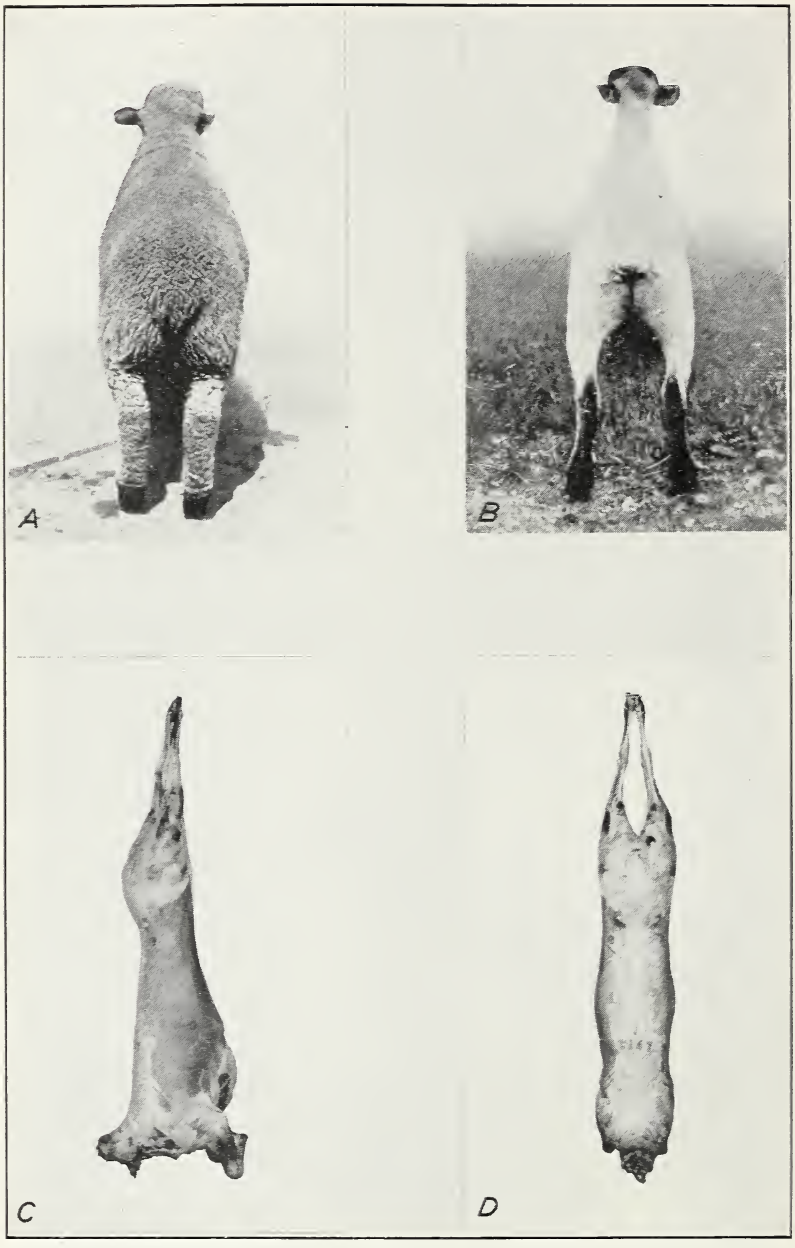
A, Choice grade Slaughter Lamb, unshorn; *B*, Choice grade Slaughter Lamb, shorn.



A, Choice grade Slaughter Lamb, unshorn; *B*, Choice grade Slaughter Lamb, shorn; *C*, Choice grade Lamb carcass, side view; *D*, Choice grade Lamb carcass, back view.



A, Good grade Slaughter Lamb, unshorn; *B*, Good grade Slaughter Lamb, shorn.



A, Good grade Slaughter Lamb, unshorn; *B*, Good grade Slaughter Lamb, shorn; *C*, Good grade Lamb carcass, side view; *D*, Good grade Lamb carcass, back view.

The flesh over all parts of the body is moderately thick. The back, loin, and rump are moderately wide. The leg is moderately large and is thick and full in the twist. The middle may be slightly paunchy or slightly constricted. The crops are moderately full and the top of the shoulder may be slightly prominent or narrow. The neck is moderately short and thick.

Finish.—The fat covering is slightly thin. It is moderately even in distribution. The fat covering over the ribs, back, loin, and rump is slightly thin, but it may be thin over the top of the shoulder.

Quality.—A Good grade Lamb has good quality. It is moderately smooth and firm in all parts of the body. It may have a slightly large or coarse head and the bones of the legs are slightly large and coarse. The shoulders are moderately smooth on top but may be slightly prominent on the side. The proportion of flesh to bone is moderately large. Such a lamb may be of either Fine-Wool- or Mutton-type breeding. The slightly thin, smooth finish over the body indicates a moderate supply of fat throughout all parts of the carcass. These characteristics indicate a moderately high degree of quality.

Medium or No. 3 Grade Slaughter Lamb

A Medium or No. 3 grade Slaughter Lamb has fair conformation, finish, and quality (pls. 10 and 11).

Conformation.—The body is slightly rangy and unsymmetrical. It is slightly shallow and narrow in proportion to its length. The flesh over all parts is slightly thin. The back, loin, and rump are slightly narrow and lack fullness to a noticeable degree. The leg is slightly small and thin, and is slightly lacking in fullness of the twist. The middle may be constricted or paunchy. The crops are slightly lacking in fullness and the shoulders are narrow. The neck is slightly thin and may be long.

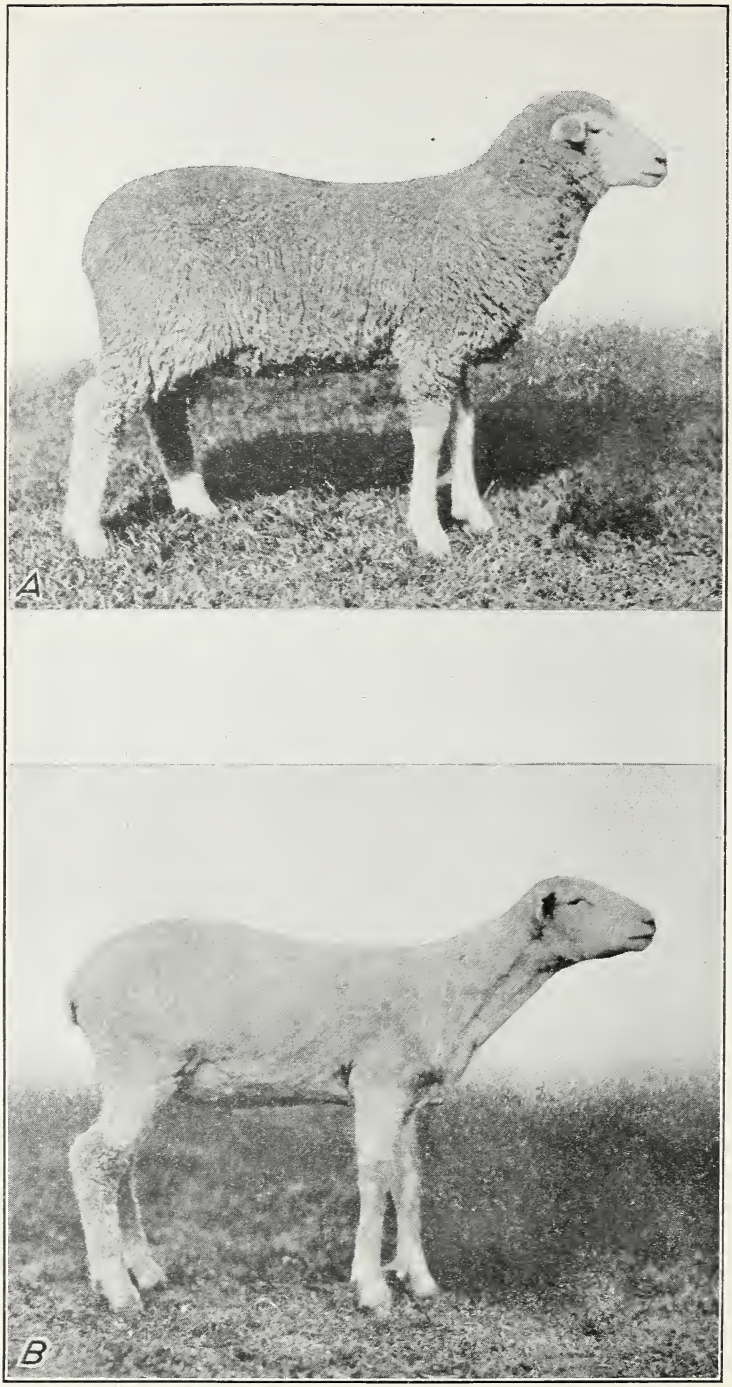
Finish.—The fat covering is thin and uneven in distribution. The bones of the shoulders, ribs, back, loin, and rump are clearly discernible to the touch indicating thin fat covering over such parts.

Quality.—A Medium grade Lamb has slightly low or only fair quality. It may have a large or coarse head and the bones of the legs may be large and coarse. The shoulders are slightly rough and open on top or may be slightly prominent or wider than the rest of the body. The proportion of flesh to bone is slightly small. Such a lamb may be of mixed or unimproved breeding of both types. The slightly thin finish over the body indicates a deficiency of fat throughout all parts of the carcass. These characteristics indicate a fair or slightly low degree of quality.

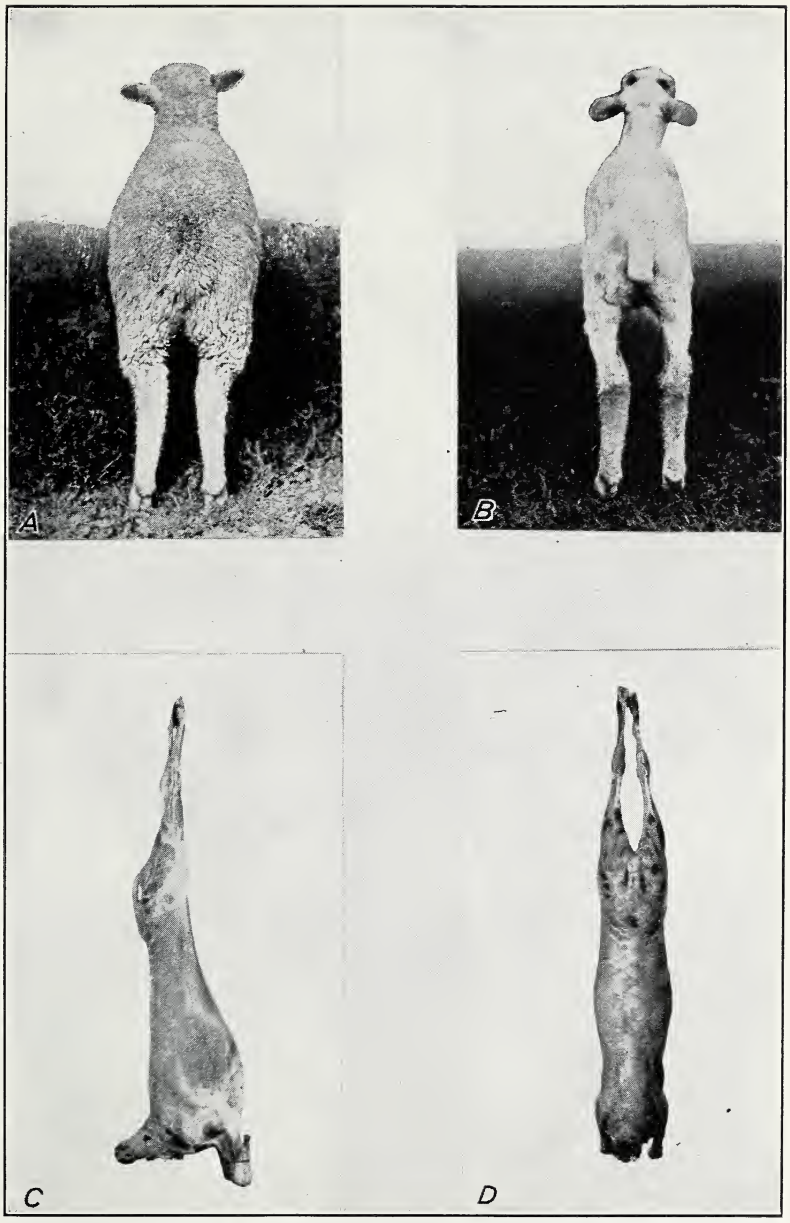
Plain or No. 4 Grade Slaughter Lamb

A Plain or No. 4 grade Slaughter Lamb has poor conformation, finish, and quality (pls. 12 and 13). (The name of this No. 4 grade was formerly "Common.")

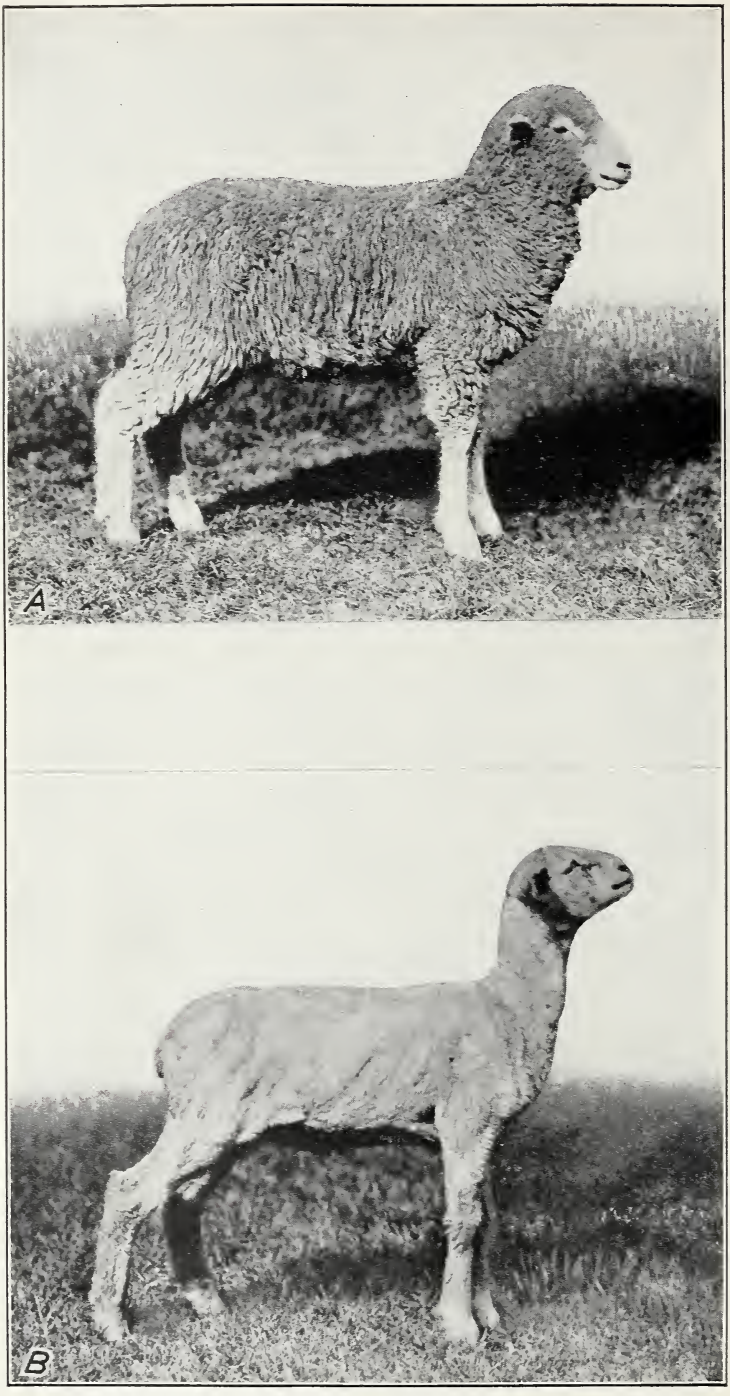
Conformation.—The body is rangy and unsymmetrical. It is shallow and narrow in proportion to its length. The flesh over all parts of the body is thin. The back, loin, and rump are narrow. The thigh is small and thin with little or no filling in the twist. The



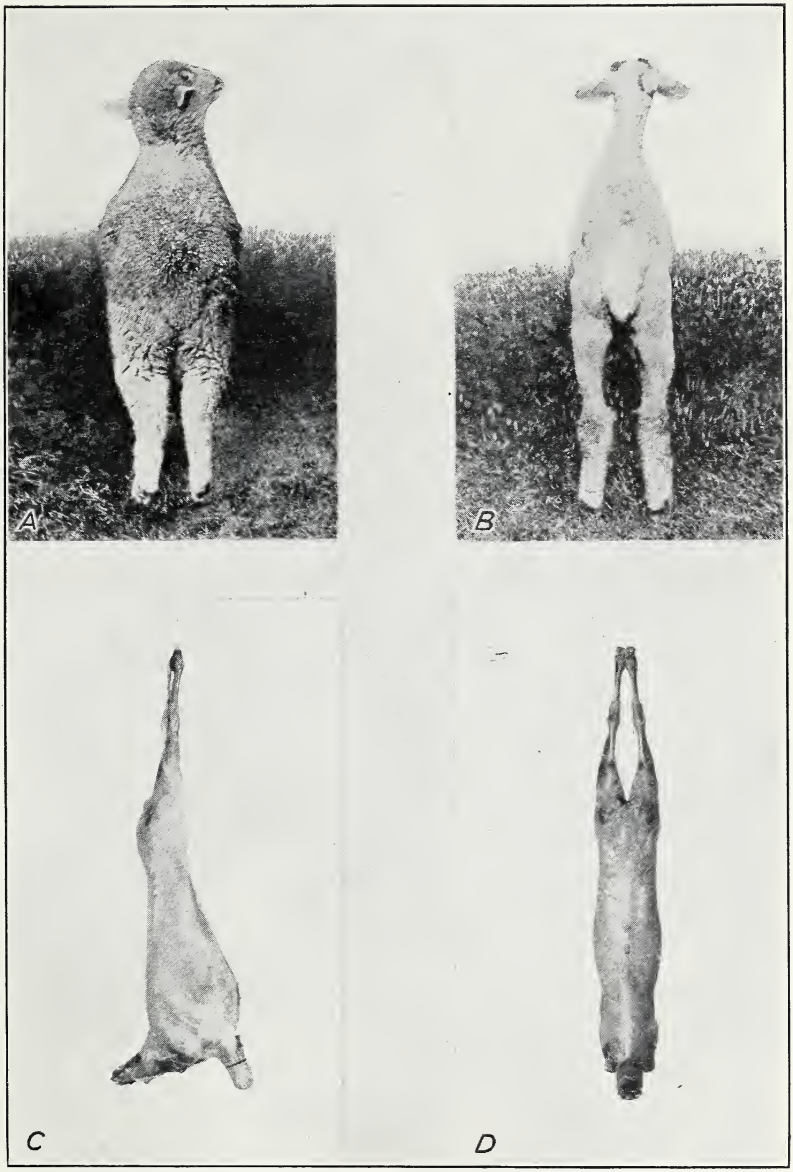
A, Medium grade Slaughter Lamb, unshorn; *B*, Medium grade Slaughter Lamb, shorn.



A, Medium grade Slaughter Lamb, unshorn; *B*, Medium grade Slaughter Lamb, shorn; *C*, Medium grade Lamb carcass, side view; *D*, Medium grade Lamb carcass, back view.



A, Plain grade Slaughter Lamb, unshorn; *B*, Plain grade Slaughter Lamb, shorn.



A, Plain grade Slaughter Lamb, unshorn; *B*, Plain grade Slaughter Lamb, shorn; *C*, Plain grade Lamb carcass, side view; *D*, Plain grade Lamb carcass, back view.

middle may be very paunchy or constricted. The crops have practically no filling and the shoulders are very narrow. The neck is thin and may be long.

Finish.—The fat covering over all parts of the body is very thin. The bones of the body are prominent to the touch; this is especially true of the shoulder, rib, spinal column, loin, and rump.

Quality.—A Plain grade Lamb has poor quality. The head and the bones of the legs may be large and coarse. The shoulders may be rough and prominent. The proportion of flesh to bone is small. Such a lamb may be of mixed or nondescript breeding and type. The thin covering of fat over the body indicates a small quantity of fat in all parts of the carcass. These characteristics generally indicate poor quality in the flesh.

Cull or No. 5 Grade Slaughter Lamb

A Cull or No. 5 grade Slaughter Lamb has very poor conformation, finish, and quality (pls. 14 and 15).

Conformation.—The body is very rangy and unsymmetrical. It is very shallow and narrow in proportion to its length. The flesh over all parts of the body is very thin. The back, loin, and rump are very narrow and the leg is small and thin, and has a very high twist. The middle is very constricted. The crops are very deficient and the shoulders are very narrow. The neck is very thin and relatively long.

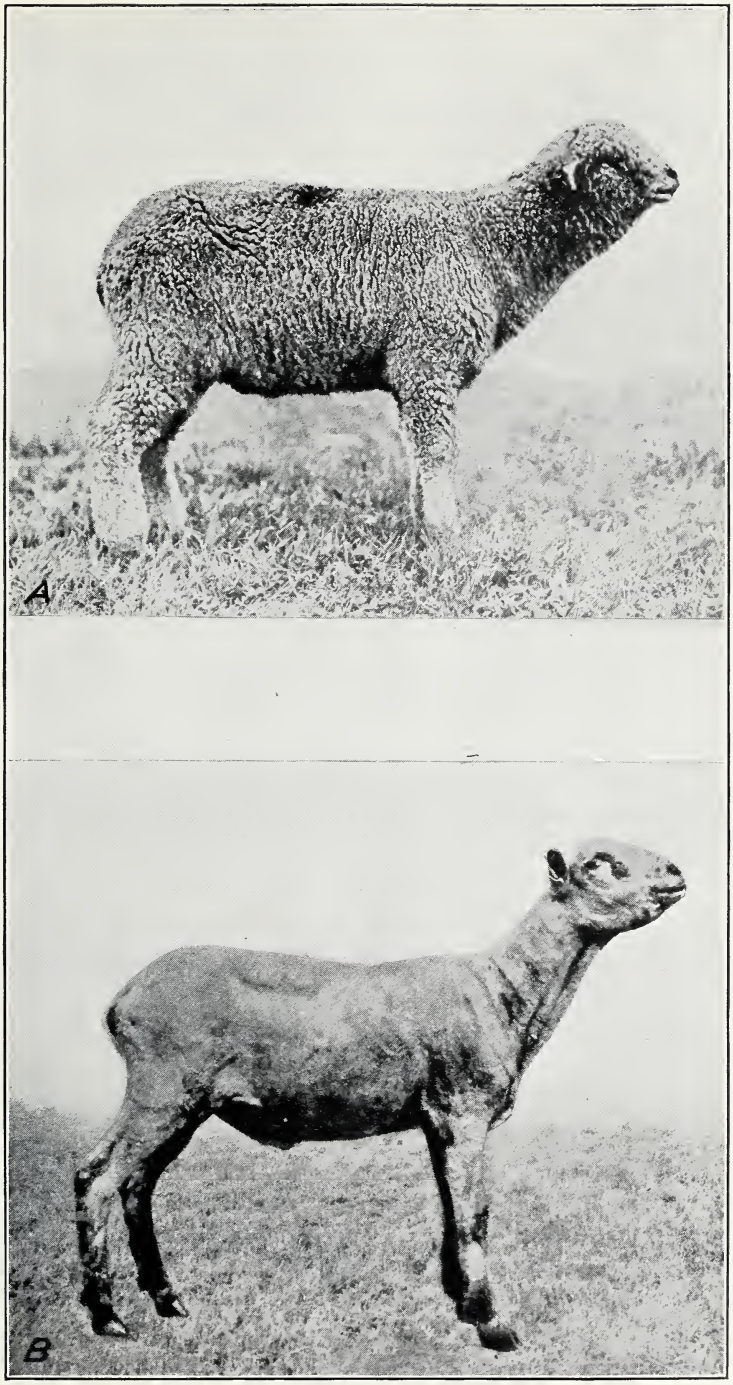
Finish.—The body is devoid of fat or so nearly so that the fat cannot be detected with the sense of touch. The bones of the body are very prominent to the touch.

Quality.—A Cull grade Lamb has very poor quality. It may have a very large and coarse head, and prominent, open shoulders, and the bones of the leg may be very large and coarse; or it may have fine bones, small head, and very narrow shoulders. The proportion of flesh to bone is very small. Cull Lambs may be of unimproved or nondescript breeding and type. The extremely thin fat covering cannot be detected. Such characteristics indicate very poor quality.

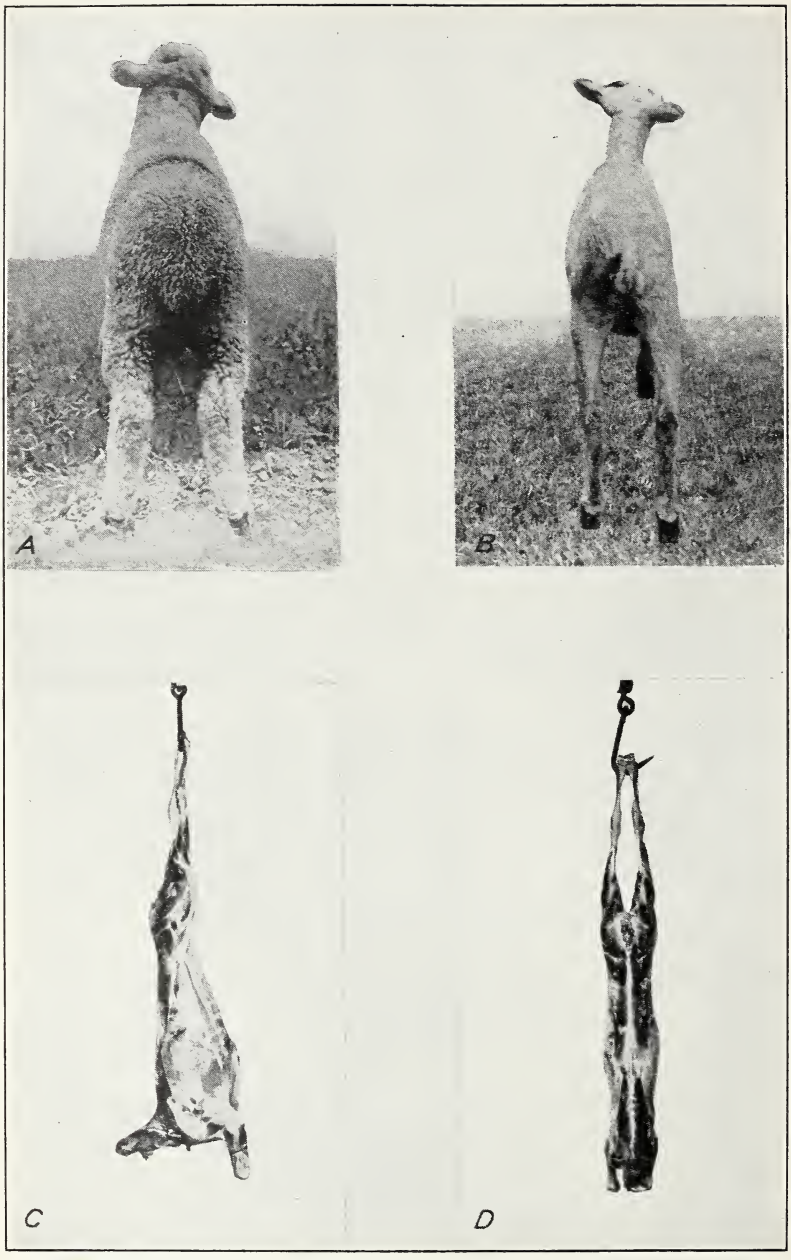
SHEEP

Sheep, as a class, are larger and more mature in appearance than Lambs. However, a Yearling that is only a few months older than a Lamb that is approaching the Yearling stage can be distinguished only by an examination of the teeth.

The following schedule gives a brief outline of the classes, subclasses, and grades of Slaughter and Feeder sheep.



A, Cull grade Slaughter Lamb, unshorn; *B*, Cull grade Slaughter Lamb, shorn.



A, Cull grade Slaughter Lamb, unshorn; *B*, Cull grade Slaughter Lamb, shorn; *C*, Cull grade Lamb carcass, side view; *D*, Cull grade Lamb carcass, back view.

SHEEP SCHEDULE

Class	Subclass (based on use)	Age designation	Weight	Grade
Ewes	Slaughter	Yearling	Lightweight and handyweight, 90 pounds down.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain [1] or No. 4. Cull or No. 5.
			Mediumweight, 90 to 100 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Heavyweight, 100 pounds up.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
		Mature (2 years old and over).	Lightweight, 100 pounds down.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Handyweight, 100 to 120 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Mediumweight, 120 to 140 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Heavyweight, 140 pounds up.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
	Feeder	All ages	All weights	Fancy or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Inferior or No. 5.

[1] Formerly designated as "Common."

SHEEP SCHEDULE—Continued

Class	Subclass (based on use)	Age designation	Weight	Grade
Wethers	Slaughter	Yearling	Lightweight, 90 pounds down.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Handyweight, 90 to 100 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Mediumweight, 100 to 110 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Heavyweight, 110 pounds up.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
		Mature (2 years old and over).	Lightweight, 100 pounds down.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Handyweight, 100 to 115 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Mediumweight, 115 to 130 pounds.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
			Heavyweight, 130 pounds up.	Prime or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
	Feeder	Yearling	All weights	Fancy or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Inferior or No. 5.
		Mature (2 years old and over).	do	Fancy or No. A1. Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Inferior or No. 5.

SHEEP SCHEDULE—Continued

Class	Subclass (based on use)	Age designation	Weight	Grade
Rams	Slaughter	Yearling	All weights	Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.
		Mature (2 years old and over).	do	Choice or No. 1. Good or No. 2. Medium or No. 3. Plain or No. 4. Cull or No. 5.

GRADES OF SLAUGHTER SHEEP

The following grade descriptions are for Slaughter Yearling Ewes and Wethers, and Mature Ewes. Although Mature Ewes are larger and more irregular in outline than Yearling and 2-year-old Ewes and Wethers, most of the characteristics of the three groups, grade for grade, are so similar that the descriptions that follow are applicable for all.

PRIME OR NO. A1 GRADE SLAUGHTER SHEEP

A Prime or No. A1 grade Slaughter Sheep has excellent conformation, finish, and quality.

Conformation.—The body is very compact and symmetrical. It is very deep and wide in proportion to its length. All parts are fully developed, producing a very smooth and even outline. The flesh over all parts of the body is very thick, giving it a very plump and well-rounded appearance. The back, loin, and rump are very wide. The leg (thigh) is very large and plump, and is very full and low in the twist. A Prime grade Sheep has a straight-lined middle. A Yearling is more uniform in this respect than a Ewe that has given birth to several lambs. The crops are very full and the shoulders are very thick, blending smoothly into the body. The neck is thick and very short.

Finish.—The fat covering is very thick, but not excessive, and extends well over all parts of the body. It is very firm and smooth, and is evenly distributed. The fat covering over the back, ribs, and loin almost entirely conceals the bones from the touch.

Quality.—A Prime grade Sheep has excellent quality. It is firm and smooth in all parts of the body. It has refined, medium-sized head and leg bones, and the shoulders are smooth and are even in width with the rest of the body. The proportion of flesh to bone is very large, and the very thick, evenly distributed, firm finish covering the body bears a close relationship to an abundance of fat throughout all parts of the carcass. These characteristics are closely associated with a very high degree of quality in the flesh.

Choice or No. 1 Grade Slaughter Sheep

A Choice or No. 1 grade Slaughter Sheep has very good conformation, finish, and quality.

Conformation.—The body is compact and symmetrical. It is deep and wide in proportion to its length. The flesh over all parts of the body is thick. The back, loin, and rump are wide. The leg is large and is full and low in the twist. The middle is nearly straight and even with the shoulders, hips, and rear flank. The crops are full and the shoulders are thick and smooth. The neck is short and moderately thick.

Finish.—The fat covering is thick and extends over nearly all parts of the body. It is firm and is even in distribution. The fat covering over the back, ribs, loins, and rump is thick.

Quality.—A Choice grade Sheep has very good quality. The body is smooth and firm in all parts. The head and the bones of the legs are moderately refined. The proportion of flesh to bone is large. The thick, smoothly distributed finish over the body indicates a large quantity of fat throughout all parts of the carcass. These characteristics indicate a high degree of quality in the flesh.

Good or No. 2 Grade Slaughter Sheep

A Good or No. 2 grade Slaughter Sheep has good conformation, finish, and quality.

Conformation.—The body is moderately compact and moderately symmetrical. It is moderately deep and wide in proportion to its length. The flesh over all parts of the body is moderately thick. The back, loin, and rump are moderately wide. The leg is moderately large and thick, and is full in the twist. The middle is slightly irregular. The crops are moderately full and the shoulders are only moderately thick and smooth. The neck is moderately short and thick.

Finish.—The fat covering is moderately thick and is moderately even in distribution, but does not extend over all parts of the body. The fat covering over the ribs, back, loin, and rump is moderately thick.

Quality.—A Good grade Sheep has good quality. The head is slightly large and the leg bones and joints are slightly coarse. The proportion of flesh to bone is moderately large. The moderately thick, firm finish over the body indicates a moderately large quantity of fat in the carcass. These characteristics indicate a moderately high degree of quality in the flesh.

Medium or No. 3 Grade Slaughter Sheep

A Medium or No. 3 grade Slaughter Sheep has fair conformation, finish, and quality.

Conformation.—The body is slightly rangy and unsymmetrical. It is slightly shallow and narrow in proportion to its length. The flesh over all parts of the body is slightly thin. The back, loin, and rump are slightly narrow. The leg is slightly small and the twist is high and lacks the fullness of the higher grades. The middle is irregular and constricted. The crops are slightly deficient and the

shoulders are narrow and sharp on top. The neck is slightly long and thin.

Finish.—The fat covering is slightly thin. The fat over the back, ribs, loin, and rump is slightly thin and over the top of the shoulder is thin, making the bones of the latter readily discernible to the touch.

Quality.—A Medium grade Sheep has slightly low or only fair quality. The head and the bones of the legs may be large and coarse. The proportion of flesh to bone is slightly small. The slightly thin fat covering over the body indicates a deficiency of fat in the carcass. These characteristics indicate a slightly low degree of quality in the flesh.

Plain or No. 4 Grade Slaughter Sheep

A Plain or No. 4 grade Slaughter Sheep has poor conformation, finish, and quality. (The name of this No. 4 grade was formerly "Common.")

Conformation.—The body is rangy and unsymmetrical. It is shallow and narrow in proportion to its length. The flesh over all parts of the body is thin. The back, loin, and rump are narrow. The leg is small. The shoulders are very narrow and the crops lack fullness. The neck is thin and long.

Finish.—The fat covering over all parts of the body is thin. This is especially true of the shoulder, back, ribs, loin, and rump, as indicated by the prominence of the bones of the body.

Quality.—The Plain grade Sheep has poor quality. It may have a large head and large bones and joints. The prominence of the bones of the back, ribs, loin, and rump shows that the proportion of flesh to bone is small. The thin fat covering over the body shows that there is a small quantity of fat in the carcass. These characteristics indicate low quality in the flesh.

Cull or No. 5 Grade Slaughter Sheep

The Cull or No. 5 grade Slaughter Sheep is very poor in conformation, finish, and quality.

Conformation.—The body is very rangy and unsymmetrical. It is very shallow and narrow in proportion to its length. The middle may be very paunchy or very constricted. The back, loin, and rump are very narrow. The leg is very small. The crops are very deficient and the shoulders are very narrow. The neck is long and very thin.

Finish.—The fat covering over all parts of the body is very thin leaving the bones of the body very prominent and discernible to the touch.

Quality.—A Cull grade Sheep has very poor quality. It may have a very large, coarse head; coarse, heavy bone; and prominent, open shoulders; or it may be extremely thin in flesh and fat covering and have small head, fine bone, and narrow shoulders. The extreme prominence of the bones of the back, ribs, loin, and rump shows that the proportion of flesh to bone is very small and the very small quantity of fat over those parts indicates a very small percentage of fat in the carcass. These characteristics indicate very low quality.

GRADES OF FEEDER SHEEP AND LAMBS

Feeder Sheep and Lambs are animals that are on feed, or are to be placed on feed, for further growth and fattening. They generally lack sufficient finish to be graded among the higher grades of slaughter animals but, as a rule, show evidences of ability to take on additional flesh and fat economically.

Feeder Sheep and Lambs are divided into groups based on class, age, weight, and grade. Sex condition is the basis for class and varying degrees of conformation, finish, and quality form the bases for the different grades. The grades ranging from the highest to the lowest are Fancy or No. A1, Choice or No. 1, Good or No. 2, Medium or No. 3, Plain or No. 4, and Cull or No. 5.

Fancy or No. A1 Grade Feeder Lamb

A Fancy or No. A1 grade Feeder Lamb has superior conformation, finish, and quality.

Conformation.—The body is compact and very symmetrical. It is wide and deep in proportion to its length. The flesh over all parts of the body is thick. The back, loin, and rump are wide. The leg is large and is full in the twist. The middle is uniform in width and depth with the shoulders and hips. The crops are full and the shoulders are smooth and are about the same width as the rest of the body. The neck is very short and the head is medium in size.

Finish.—The fat covering is moderately thick and smooth and is evenly distributed over the body.

Quality.—The Fancy grade Lamb has excellent quality. The skin is thin and smooth. It has refined, medium-sized head and bone, and the shoulders are smooth. Such a Lamb is usually of Mutton-type and has either purebred or crossbred markings.

Choice or No. 1 Grade Feeder Lamb

A Choice of No. 1 grade Feeder Lamb has excellent conformation, finish, and quality.

Conformation.—The body is moderately compact and symmetrical. It is moderately deep and wide in proportion to its length. The flesh over all parts of the body is moderately thick. The back, loin, and rump are moderately wide. The leg is moderately large and is moderately full in the twist. The middle is moderately uniform in width and depth with other parts of the body. The crops are moderately full and the shoulders are moderately wide and smooth. The neck is short and the head is medium in size.

Finish.—The fat covering is slightly thin and is evenly distributed over the body.

Quality.—A Choice grade Lamb has very good quality. The skin is moderately thin. It has medium-sized head and bone and the shoulders are smooth and are even with the rest of the body. Mutton-type characteristics usually predominate and the characteristics of the head and shape of body indicate a large percentage of improved breeding.

Good or No. 2 Grade Feeder Lamb

A Good or No. 2 grade Feeder Lamb has good conformation, finish, and quality.

Conformation.—The body is slightly rangy and unsymmetrical. It is slightly shallow and narrow in proportion to its length. The flesh over all parts of the body is slightly thin. The back, loin, and rump are slightly narrow. The leg is slightly small and is deficient in the twist. The middle is slightly irregular. The crops are slightly deficient, and the shoulders are slightly narrow and rough. The neck is slightly long and the head may be slightly large.

Finish.—The fat covering is thin and may be slightly uneven in distribution over the body.

Quality.—A Good grade Lamb has good quality. The skin is slightly thick with few small folds. The features of the face and head, leg bones, and joints may be slightly coarse. Both the Mutton- and Fine-Wool-types are found in the Good grade; the characteristics of crossbred animals and those indicating mixed breeding predominate.

Medium or No. 3 Grade Feeder Lamb

A Medium or No. 3 grade Feeder Lamb has fair conformation, finish, and quality.

Conformation.—The body is rangy and unsymmetrical. It is shallow and narrow in proportion to its length. The flesh over all parts of the body is thin. The back, loin, and rump are narrow. The leg is small and is deficient in the twist. The middle is slightly constricted or is paunchy. The crops are deficient and the shoulders are narrow and rough. The neck is long and the head may be large.

Finish.—The fat covering over the body is very thin.

Quality.—A Medium grade Lamb may have low quality. The skin is thick and there may be folds about the neck and over the body. The features of the face and head may be coarse. The characteristics of the Fine-Wool-types and those indicating mixed breeding predominate in this grade.

Plain or No. 4 Grade Feeder Lamb

A Plain or No. 4 grade Feeder Lamb has poor conformation, finish, and quality. (The name of this No. 4 grade was formerly "Common.")

Conformation.—The body is very rangy and unsymmetrical. It is very shallow and narrow in proportion to its length. The flesh over all parts of the body is very thin. The back, loin, and rump are very narrow. The leg is very small and is deficient in the twist. The middle is constricted or is very paunchy. The crops are very deficient and the shoulders are very narrow and uneven. The neck is very long and the head may be very large.

Finish.—The fat covering is extremely thin and is unevenly distributed.

Quality.—A Plain grade Lamb may have poor quality. The skin may be very thick and numerous folds are on the neck and body. The features of the face, head, and shoulders may be very coarse. Crossbreeding or those characteristics that indicate unimproved breeding may predominate.

Inferior or No. 5 Grade Feeder Lamb

An Inferior or No. 5 grade Feeder Lamb has very poor conformation, finish, and quality.

Conformation.—The body is extremely rangy and unsymmetrical. It is extremely shallow in proportion to its length. The flesh over all parts of the body is extremely thin. The back, loin, and rump are extremely narrow. The leg is extremely small and is deficient in the twist. The middle is usually very constricted. The crops are extremely deficient and the shoulders are extremely narrow. The neck may be extremely long and narrow, and the head may be extremely large.

Finish.—The fat covering is so thin that it cannot be detected.

Quality.—An Inferior grade Lamb may have very poor quality. The skin may be extremely thick and numerous large folds may be found over all parts of the body. The features of the face, head, and shoulders may be extremely coarse. The leg bones and joints may be large. Nondescript or mixed breeding may predominate.

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